

REMARKS/ARGUMENTS

Status of the claims

Claims 39, 65, 67, 71, and 73 were pending in the above-referenced application for patent, and have since been rejected under FINAL office action as being anticipated by Schmaltz (U.S. Patent 6,050,996). Claims 39 and 71 were also rejected as anticipated by Buysse (U.S. Patent 5,776,130). Claims 40, 41, 66, and 72 were rejected as being obvious in light of Schmaltz and the state of the art at the time the invention was made. Finally, claims 68 and 72 were rejected as being unpatentable over Schmaltz in view of Choudhury (U.S. Patent 5,219,354). Independent claims 39 and 71 are currently amended as to overcome such rejections. No new matter has been added.

Claim amendments to independent claims 39 and 71

Independent claims 39 and 71 have been rejected as being unpatentable over Schmaltz and Buysse, and Applicants hereby request that such claims be amended to include the above-listed language. In an effort to overcome Examiner's rejections, Applicant requests that the adjustable stop member of independent claim 39 be amended to include the following language: "and limits the extent to which the electrodes may compress said tissue portion". Applicant also requests that the stop means of independent claim 71 be amended to include the following language: "and the stop means further limiting the extent to which the electrodes may compress said tissue portion."

The new claim limitations are entirely supported by the existing disclosure such that no new matter has been added. Particular attention is directed to paragraphs 35, 120, and 121 of Applicant's Specification. Arguments made to Examiner based on such paragraphs have highlighted the previously-included matter and include the following:

Too much pressure applied to the flange of the incision can result in considerable volumetric deformation of tissue in the bonding zone such that it increases the time required to heal the tissue after bonding. *See* Specification at paragraph 35. "Further deformation of the arms [such as to exert too much pressure on the flange of the incision] under the pressure from the surgeon's fingers is limited by the lug and opposed arm coming in contact. ... Further increases of pressure by the surgeon's fingers will not change the compression force applied by the electrodes." Applicant's Specification paragraphs 120-1.

Specifically, Schmaltz *et al.* fails to recite all elements included in the currently-amended claims of this application as is required to anticipate under 35 U.S.C. §102. Specifically, the Schmaltz patent does not disclose an apparatus or method through which the pressure on either side of the incision is limited by preventing the extent to which the forceps may be deformed. Schmaltz discloses first and second interlocking ratchets to provide a constant closure force of the electrodes about the incision; however, the interlocking ratchets do not limit the extent to which pressure may be applied about the incision as the ratchets have multiple settings that are determined by how much pressure is applied to the forceps. A user could easily exert too much pressure on the forceps resulting in the incorrect application of pressure and burning or scarring of the tissue. The current claim amendments overcome Schmaltz by preventing such overexertion of pressure.

Similarly, Examiner rejected claims 39 and 71 as being anticipated by Buysse *et al.* The current amendments to claims 39 and 71 are made to overcome the Examiner's anticipation rejections of such claims. Buysse discloses a "hydraulic coupling as part of a

lost motion connection between the end effectors.” Buysse at col. 4 line 26. Again, as above, Buysse fails to disclose that which is currently claimed. The Buysse hydraulic coupling and lost motion connector utilize pressure exerted on the actuator or handles to determine the extent to which pressure is applied to the tissue about the incision. However, a user of such an apparatus can mistakenly exert too much pressure on the tissue to be welded and cause burning and scarring. The currently-amended claims overcome anticipation rejections as both claims 39 and 71 specifically claim the feature of limiting the extent to which pressure may be applied to the tissue about the incision so as to prevent the overexertion of pressure beyond that to which the apparatus is set thereby preventing possible burning and scarring of the tissue. The above-requested amendments to independent claims 39 and 71 incorporate such amendments as found in and supported by the previously submitted specification and are sufficient to overcome Examiner’s rejections.

Dependent Claims 65, 67, and 73 are not anticipated by the Schmaltz Patent

The Examiner rejected claims 65, 67, and 73 as being anticipated by the Schmaltz prior art. However, the Applicant respectfully traverses the Examiner’s rejections and argues that such claims are not anticipated under 35 U.S.C. §102(e). Claim 65 is not anticipated as it is dependent upon currently-amended independent claim 39. *See* 35 U.S.C. §112 ¶4. Because claim 65 incorporates specifically all of the elements of claim 39, which is novel, claim 65 is not anticipated by the Schmaltz patent. Therefore, the Applicant respectfully requests that claim 65 be allowed to issue.

With respect to dependent claims 67 and 73, Applicant submits that the structure and function of the disclosed one or more spacers is inherently different from, and

therefore, not anticipated by the ridges illustrated in Figure 1 of the Schmaltz prior art. This issue was argued in Applicant's previous office action response, dated December 23, 2005, which Applicant seeks to currently clarify. The Schmaltz ridges and the one or more spacers of the current invention both define the distance between the electrodes and thereby define the pressure on and resultant compression of the tissue to be welded together. The one or more spacers of the current invention specifically stop the exertion of too much pressure and prevent excessive compression of the tissue. However, the Schmaltz ridges allow for such excess pressure and compression in two ways: (1) the ridges do not protect against the erroneous application of pressure because as the handles are squeezed the ridges will easily slip past each other to the next ridge, thereby applying more pressure than intended, (2) the action of the sliding ridges will necessarily apply too much pressure on the tissue because the required pressure applied to the handles to set the device to the intended pressure must be sufficient to overcome the strain energy held in the handles and move one ridge over the next, but the required pressure to achieve the intended pressure must be less than that required to overcome the next ridge. Because the application of the required pressure to get over the ridge of the intended setting, the pressure exerted by the electrodes on the tissue will be more than the pressure intended. The one or more spacers of the disclosed invention specifically prevent the overexertion of pressure on the tissue regardless of how much pressure is applied to the handles of the device. Thus, claims 67 and 73 are not anticipated by the Schmaltz prior art. Furthermore, both claims 67 and 73 are not anticipated as they are dependent upon independent claims 39 and 71, respectively. Therefore, Applicant respectfully requests that claims 67 and 73 be allowed to issue.

Claims 39 and 71 are not obvious

Examiner implicitly rejected independent claims 39 and 71 as being obvious in light of Schmaltz, Schmaltz and the state of the art at the time of invention, and Schmaltz in view of Choudhury. Applicant respectfully submits that claims 39 and 71 are not obvious in light of the cited art. Claims 39 and 71 are currently amended to include the nonobvious element of limiting the extent to which the electrodes may compress the portion of tissue intended to be welded as the claimed element is not taught in the prior art and there is no suggestion or motivation presented in the prior to combine elements of or modify the prior art. Thus, there is no *prima facie* case of obviousness established. No combination of the cited art recites every claimed element of the current application. There is no mention in the cited prior art of the dangers of overexertion of pressure on the portion of tissue, which would provide motivation. The motivation for the Schmaltz ratchets was to provide for a more comfortable tool for doctors so that they would not have to maintain a constant grip on the handles. *See* Schmaltz at col. 4 line 63 to col. 5 line 5. The Schmaltz reference actually teaches against embodiments of the current invention because the current invention sometimes requires the user to maintain a pressure on the forceps. *Id.* The Choudhury reference discloses a pair of scissors that also staples a blood vessel. In Choudhury, there is no discussion of the dangers of compressing the tissue to be welded too much. Furthermore, being careful to avoid hindsight, there is no indication of the level of skill in the art at the time of invention to indicate that the claimed limitations of the current invention would be obvious. Thus, independent claims 39 and 73 are not obvious in light of the cited art.

Claims 40, 41, 66, and 72 are not obvious in light of Schmaltz

Examiner rejected dependent claims 40, 41, 66, and 72 as being obvious in light of Schmaltz in view of the level of knowledge of one skilled in the art at the time of the invention. Examiner rejected claims 40 and 41 as involving only routine skill in the art to determine the optimal volume and metallic properties of the electrodes, respectively. It has been previously argued that the prior art does not contain, suggest, teach, or provide motivation for one to pursue these elements of the current invention. *See* Response to Office Action dated December 23, 2005, pages 5-6. Applicant respectfully disagrees with Examiner and re-asserts that, because such elements are not even contemplated by the cited prior art, claims 40 and 41 are not obvious. Hindsight must be avoided in this analysis so as to not impermissibly view the state of the art at the time the invention was made with today's perspective. Furthermore, claims 40 and 41 are dependent upon novel, nonobvious claim 39 and are therefore novel and nonobvious as a dependent claim specifically incorporates every element of the claim upon which it depends. 35 U.S.C. §112 ¶4.

Examiner rejected claims 66 and 72, after taking official notice that the stop member disclosed by Schmaltz would be a lug, as being routine skill in the art. It has been previously argued, in the Response dated December 23, 2005, that the stop member disclosed by Schmaltz would not be seen by one skilled in the art as a lug and that claims 66 and 72 are not obvious. Applicant respectfully continues to submit that the Schmaltz ratchets are inherently different, structurally and functionally, from the current invention's disclosed lug. In light of the above-reviewed arguments with respect to the Schmaltz ratchets, claims 66 and 72 are nonobvious. Furthermore, because claims 66 and 72 are both dependent upon currently amended claims 39 and 71, respectively, claims 66

and 72 should be allowed as being dependent upon novel and nonobvious independent claims. The prior art does not contain, teach, suggest, or motivate the production of every claimed element of the current invention.

Claims 64 and 73 are not rendered obvious in light of Schmaltz in view of Choudhury

Examiner rejected dependent claims 64 and 73 as being obvious in light of Schmaltz in further view of Choudhury. However, Applicant respectfully submits that claims 64 and 73 are not obvious in light of the cited art. Applicant has vigorously argued that the knob as disclosed in Choudhury is completely different from the knob of the current invention. *See* Response dated December 23, 2005.

There is a knob 108 with a recess 109 for the operator's finger on the external side of the arm. A strictly fixed location of the operator's finger relative to the arm is an essential condition for controlling the clamping force on the tissue. A recessed spot for the operator's finger makes manipulation easier, especially with a small size tool. (Applicant's Specification, ¶ 124).

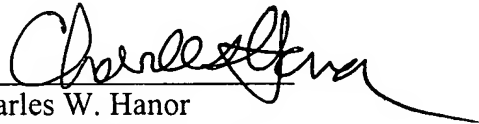
Merely because both the current specification and the prior art refer to a structure as a "knob" does not mean that one renders the other obvious. The patent draftsman is her own lexicographer. The full disclosure of the specification, including the drawings, indicates that the knob of the current invention is stationary, gripped by the fingers of the user, and on the external side of the arm; however, the knob of the prior art slides over a series of ratchets to assist in the stapling of a blood vessel, is not handled by the user, and located internally between the two members. The current invention's disclosed knob is not contained in the cited art. Furthermore, there is no motivation or suggestion to provide such elements of the current invention in the prior art. Thus, there is no *prima facie* obviousness rejection established. Applicant respectfully requests that claims 64 and 73 be allowed to issue. Moreover, claims 64 and 73 are dependent upon currently-

amended, novel, and nonobvious independent claims 39 and 71 and are therefore novel and nonobvious as claims 64 and 73 specifically incorporate every element of the claims on which they depend. Applicant requests that claims 64 and 73 be allowed to issue.

Conclusion

Believing that all things raised in the Examiner's March 09, 2006 Final Office Action have been addressed, the undersigned respectfully requests that the application be allowed and passed to issue.

Respectfully submitted,



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